

Title (en)
THERMAL RADIATION DETECTOR

Publication
EP 0272731 A3 19900704 (EN)

Application
EP 87202378 A 19871201

Priority
GB 8629109 A 19861205

Abstract (en)
[origin: EP0272731A2] A thermal radiation detector suitable for detecting radiation in a given wavelength range, for example 5 to 15 micrometres, includes a detecting element (10), such as a pyroelectric element, and a structure coupled to the element for improving performance by optimising the absorption characteristic of the detector over a wide wavelength range. The structure comprises two dielectric layers (12 and 18) preceding the detecting element with optical thicknesses substantially one quarter of a selected wavelength in the wavelength range and an intermediate resistive layer (17) for absorbing incident radiation in the wavelength range. A reflective layer (15) is preferably disposed between the element and the adjacent dielectric layer. The dielectric layers may both comprise ZnS or Ge. One layer may comprise a portion of a flexible film used to support the detector.

IPC 1-7
G01J 5/08; **G01J 5/34**

IPC 8 full level
G01J 1/02 (2006.01); **G01J 1/04** (2006.01); **G01J 5/08** (2006.01); **G01J 5/34** (2006.01)

CPC (source: EP US)
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G01J 5/0025 (2013.01 - EP US); **G01J 5/34** (2013.01 - EP)

Citation (search report)
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• [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 90 (P-350)(1813) 19 April 1985, & JP-A-59 218925 (MATSUSHITA DENKI SANGYO K.K.) 10 December 1984,

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